

2015

# LEBANON FIRE DEPARTMENT



ANNUAL REPORT



## **CHIEF'S MESSAGE**

I am proud to present the Annual Report for the City of Lebanon Fire Department. This document will highlight the key areas of responsibility and overall strategy for ensuring that our residents and visitors receive the highest level of Fire and Emergency Medical Services.

2015 presented a number of challenges and changes to the department. New development projects and an overall increase in the demands of department service continue to strain our resources.

The Department continues to strive to improve in a number of areas in alignment with our Department outcomes. There were a number of initiatives that assisted with our improvement last year and have helped to build a foundation for the future of Fire and Emergency Medical Services for the City of Lebanon.

The Lebanon Fire Department is an active, efficient, effective, and professional organization within the community. I would like to thank the Lebanon City Council, Mayor, City Manager, City Departments, the residents of the City we proudly serve, and the dedicated members of the Lebanon Fire Department for your support.



*Chris Christopoulos, Jr., MA, CFO*

*Fire Chief-Emergency Management Director*



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## EXECUTIVE SUMMARY

The primary focus of this report will to be highlighting the Department's successes over the last year as they relate to the department's outcomes and mission statement. Each division within the fire department works in unison to ensure that we provide the highest level of Fire and Emergency Medical Services to the residents and visitors of our community, while maintaining fiscal responsibility.

### Fire Department Work Plan

The Fire Department Work Plan identifies four major public safety outcomes:

1. **HEIGHTENED CITIZEN AWARENESS AND ENGAGEMENT**
2. **"BEST IN CLASS" FIRE & EMERGENCY MEDICAL SERVICES**
3. **SAFETY & SECURITY OF LIFE AND PROPERTY FOR BUILDING CONSTRUCTION AND OCCUPANCY**
4. **IMPROVED CITIZEN AWARENESS OF EMERGENCY PREPAREDNESS**

The Department's annual budget aligns with our strategies as set forth in the Fire Department Business Plan. One of our major challenges

continues to be our data collection. Our strategies for each outcome are highlighted below.

2015 Community and Department Information	Total
<b>Population Served (resident)</b>	13,500
<b>Population Served (day time)</b>	30,000
<b>Assessed Valuation</b>	\$1876 Million
<b>Insurance Services Rating</b>	4/4X
<b>Total Fire Department Staffing</b>	
Full Time Uniformed Firefighters	27
Call Firefighters	7
Support Staff	6
Administration	3
<b>Stations</b>	3
<b>Vehicles and Apparatus</b>	
Engines and Tankers	3
Ladders	2
Ambulance and Rescue	4
Staff Vehicles	4
<b>Total Budget (2015)</b>	\$4,116,770
<b>Total Revenues</b>	\$811,474
<b>Annual Fire Protection Net Cost per \$1000 of Assessed Valuation</b>	\$.57



1. **HEIGHTENED CITIZEN AWARENESS AND ENGAGEMENT** – our major goals with this outcome is to have our citizens better understand the services we provide and in turn reduce the number of non-emergency calls for service each year. In 2015 we participated in the second Public Safety Citizens Academy. The attendees learned about the various services the fire department provides. Additionally, this year all participants received classroom and hands-on fire extinguisher training. To measure our success or failure in this outcome we will measure the % of our residents attending the annual Citizens Academy and the % reduction or increase in non-emergency calls for service.
2. **“BEST IN CLASS” FIRE & EMERGENCY MEDICAL SERVICES** – our major goals with this outcome are to constantly review our current operations and delivery model for emergency services to stay current with the demands for our services. To meet this goal the Department has begun to update our operational standard operating procedures and is leveraging our relationship with the Hanover and Hartford, VT fire departments to share both personnel and equipment resources for high risk emergency calls, such as water and high angle rescue. This aligns with our fire service delivery model of a “regional response” to all building fires. Also, during 2014 the Insurance Services Office (ISO) completed a review of the departments training, staffing, apparatus inventory, deployment plans, and fire prevention activities to assess our overall readiness and to re-establish the City’s risk rating for fire. Our rating remained a 4 in the area of the community which has access to the municipal water system and a 4X (formerly 9) in the areas without access to fire hydrants. ISO ratings are utilized to set homeowners insurance rates but have a bigger impact on commercial/industrial occupancies. Our success or failures in this outcome will be measured by the number of policies updated annually and refinement of our data gathering to look into future accreditation of the department.
3. **SAFETY & SECURITY OF LIFE AND PROPERTY FOR BUILDING CONSTRUCTION AND OCCUPANCY** – major goals in this outcome are to maintain current with our locally adopted Fire Code. This update will include a proposed self-inspection program for multi-family dwellings and a fee structure that is better aligned with our Fire Prevention Division and Administration demands. According to a study completed by DisasterSafety.org updated codes are important as stated, *“For building owners, occupants, investors, insurance providers, elected officials and citizens, enforced, updated codes establish a baseline for acceptable and cost-effective quality and performance. Conversely, when state and local authorities do not adopt and enforce current codes, they are allowing construction of buildings that do not meet the current consensus on minimum public health and safety”*<sup>1</sup>. In 2014, the Department conducted a comprehensive review of all local fire codes and the fee structure associated with the

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<sup>1</sup> <https://www.disastersafety.org/wp-content/uploads/The-Value-and-Impact-of-Building-Codes-by-Ellen-Vaughn-Jim-Turner.pdf>, accessed April 2014.



current code. In 2015 the Lebanon City Council approved a comprehensive update to the City's Fire Prevention Code. The Department will measure success or failure by the number of tenant complaints received from multi-family dwellings and the number of responses to the self-inspection program.

4. **IMPROVED CITIZEN AWARENESS OF EMERGENCY PREPAREDNESS** – maintaining readiness for a community response to natural and manmade disasters remains a priority within the Fire Department. Our goals with this outcome are to develop better communications tools for the distribution of timely and accurate information to the public and to increase awareness for personal emergency preparedness. City Emergency Management staff can now access the Statewide Reverse 911 System via the web to initiate messages during an emergency. Success or failure will be measured by the number of views to the emergency management web page and various social media outlets.

### **Items of Interest**

- ❖ Compared to ten years ago calls for service have increased **16.8%**.
- ❖ Compared to ten years ago Department revenues have increased **94%**.
- ❖ In 2015 the department responded to **3181** calls for service. Of this total, **1047** times the department had multiple simultaneous calls.
- ❖ 69.25% of the calls for service were for Emergency Medical Services.
- ❖ The Department provided mutual aid 69 times.
- ❖ The Department received mutual aid from other communities 75 times.
- ❖ The Department responded to 60% of the Building Fires within 5 minutes or less and to 66% of the Emergency Medical Calls within 5 minutes or less.
- ❖ The Fire Prevention Division conducted 1140 inspections of new and existing occupancies.
- ❖ Department personnel participated in over 70 Community Events (Touch-a-Truck, Fire Drills, Safety Fairs, Fire Extinguisher Training, CPR Training, Parades, etc.)



## ORGANIZATIONAL OVERVIEW

### Vision Statement

*The Lebanon Fire Department will provide exceptional fire protection and emergency medical services to the community. These services will be provided through a professional organization that is adequately staffed, highly trained, and properly equipped.*

### Mission Statement

*The primary mission of the Lebanon Fire Department is the protection of lives, property, and the environment through emergency services, prevention, and education.*

### Operating Philosophy

*The Lebanon Fire Department's most valuable asset is highly trained, dedicated and professional personnel. We strive to provide quality services through:*

- ❖ *Fiscal responsibility*
- ❖ *Ethics and integrity*
- ❖ *Courtesy and respect*
- ❖ *Open and honest communications*
- ❖ *Continuous improvement*
- ❖ *Vision*
- ❖ *Balancing individual , family, community and organizational growth*
- ❖ *Reasonable balance of personal risk*
- ❖ *Teamwork*
- ❖ *Empowerment and knowledge*



The Lebanon Fire Department provides Fire and Advanced Life Support Emergency Medical Services to a primary response area of 41.1 square miles and under an automatic mutual aid agreement to an additional area of 96 square miles. The Department operates from two stations which are staffed 24 hours per day 7 days per week. Station 1 is located on South Park Street in downtown Lebanon and Station 2 on Main Street in West Lebanon on the western side of the community. There is a third station located on Route 4 in east Lebanon which is currently used to store specialized response trailers. Station 1 is staffed by the Fire Chief, Assistant Fire Chief, Part-time Administrative Secretary, two Fire Inspectors (Monday through Friday days) and a Captain and two or three firefighters. Station 2 is staffed by a Lieutenant and one firefighter. Full-time staff is supplemented by a call force and the recall of off-duty full time personnel for major emergencies or when the department is managing multiple calls.

The Department provides the following services:

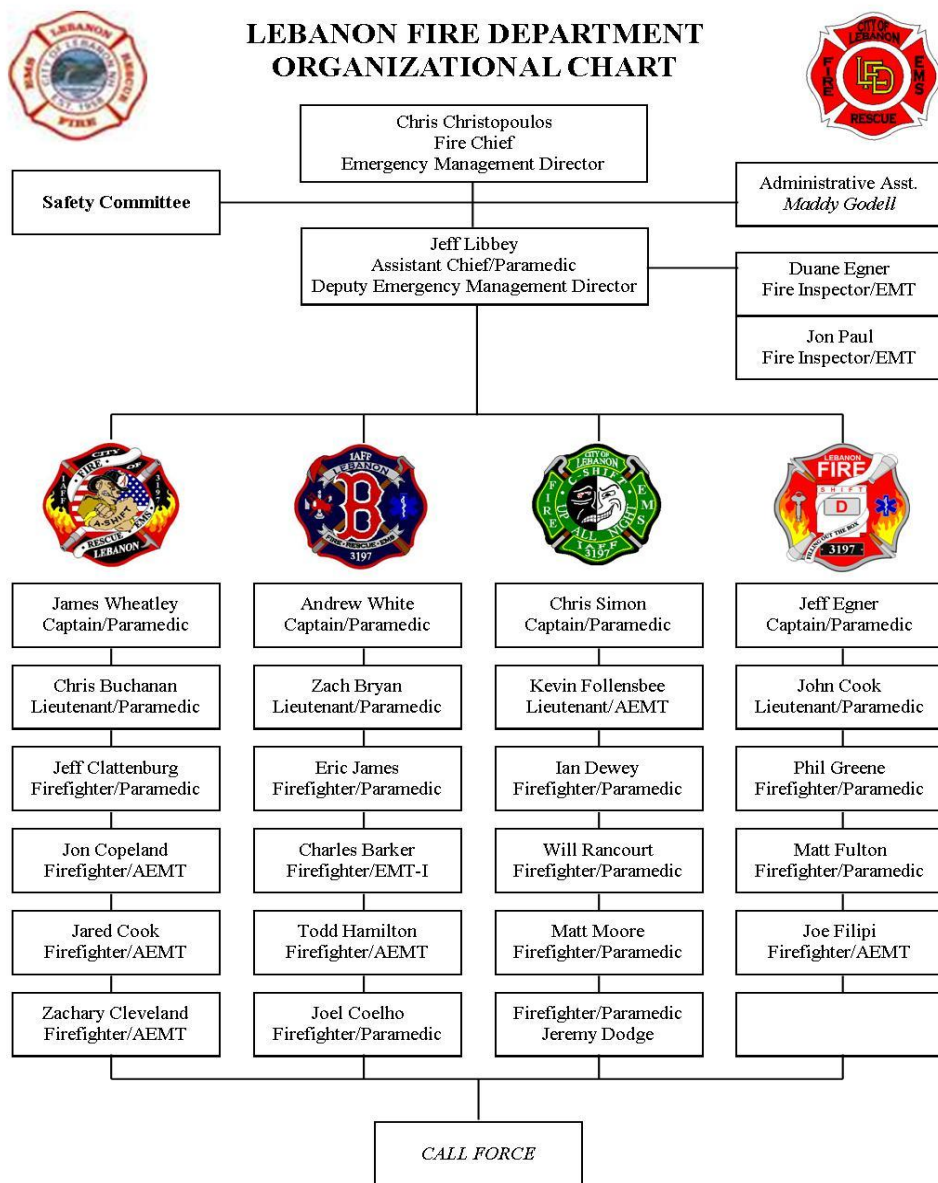
**Primary Services**

- ❖ Firefighting
- ❖ Advanced Life Support Emergency Medical Services
- ❖ Technical Rescue
  - Vehicle Rescue
  - High Angle Rescue
  - Swift and Cold Water Emergency Response
  - Confined Space Rescue
- ❖ Hazardous Materials Emergency Response
- ❖ Fire Prevention
- ❖ Emergency Management

**Secondary Services**

- ❖ Fire Alarm and Communications Maintenance
- ❖ Public Education
- ❖ Vehicle Maintenance
- ❖ Building Maintenance
- ❖ Community Service







In an effort to provide the highest and most efficient delivery of services, the Fire Department is divided into several divisions. Each division has a critical area of responsibility to ensure that all personnel and equipment resources are in a constant state of readiness. The following chapters will focus on the following divisions:

- ❖ Administration
- ❖ Operations
- ❖ Emergency Medical Services
- ❖ Training
- ❖ Fleet and Equipment Maintenance
- ❖ Building Maintenance
- ❖ Fire Alarms and Communications
- ❖ Fire Prevention
- ❖ Emergency Management

**MAJOR GOALS FOR 2016**

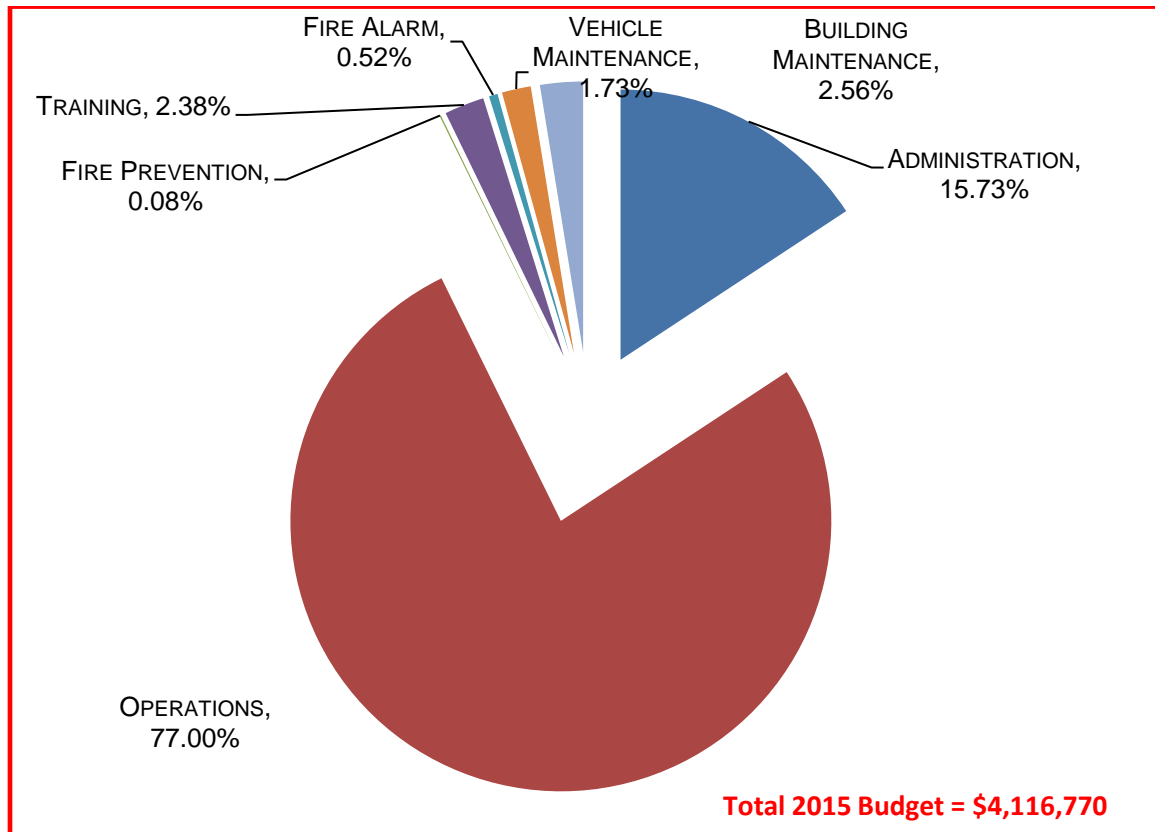
- ❖ Update the department's business plan to better align our goals to the City of Lebanon Master Plan.
- ❖ Research and develop a plan for station upgrades and assess our current station locations.
- ❖ Update the City's Hazard Mitigation Plan.
- ❖ Seek funding to fill the vacant firefighters position.
- ❖ Implement a Multi-Family Dwelling Self-Inspection Program.
- ❖ Implement the Fire Alarm Technician registration program as adopted with the revisions of the City of Lebanon Fire Prevention Code.



## ADMINISTRATION

Fire Department administration consists of the Fire Chief, Assistant Fire Chief, and a Part-time Administrative Secretary working out of Station 1. Administration is responsible for strategic leadership, financial planning, budget development, accounts payable, accounts receivable, payroll, and overall day-to-day management of the Fire Department. Further, the Fire Chief serves as the City of Lebanon Emergency Management Director and is responsible for ensuring the City's readiness for natural and manmade disasters and as the City's liaison to the Hanover-Lebanon Regional Emergency Planning Committee and the Dartmouth-Hitchcock Medical Center Emergency Management Committee.

## 2015 BUDGET OVERVIEW





## OPERATIONS

The Lebanon Fire Department had another successful year in 2015. It was a year of many projects that we continue to work on and some completed projects will increase productivity by leveraging technology to reduce administrative time and others to increase personnel safety.

### Call Firefighters

The department relies on call firefighters to supplement full-time staff during times where we have multiple calls or major emergencies. Over the last several years we have seen a decline in the number of call firefighters from a high of 20 in 2002 to just 5 in 2015. The department began to recruitment effort to increase this number in 2015. By year's end we were able to hire 2 call firefighters and have several others in process for early 2016.

### Dispatch Capabilities

The fire department has been working with Lebanon Communications to better leverage new technologies. The use of new technologies will provide more reliable notification to fire department personnel and increase our overall response times. One of the biggest projects was integrating Active 911, which is software that allows firefighters throughout the Upper Valley and the entire state to receive both EMS and Fire related incidents over cellular, tablets, and laptop computers, into the Lebanon Communications Center. This software allows supervisors to view the incidents, responding personnel, area maps, fire hydrant locations, water access points, and pre-fire incident plan information. This information not only viewed on mobile devices, but also at the Lebanon Communications Center.

The three Upper Valley dispatch centers have also created a first alarm toning system that will notify each full-time fire department when there is a structure fire or the need for automatic aid. This system provides simultaneous, early notification, which will provide quicker turnout response times to major incidents.



This system was created by placing pagers at each dispatch center with each of the fire department frequencies. When any of the communications centers dispatches a fire call where automatic mutual aid is indicated, the pagers are activated during the normal dispatch process. This reduces the notification time, which was previously done by phone calls, and ultimately increases public and first responder safety by providing critical personnel resources in a timelier manner.

Another joint initiative was the creation of “Bench Marking”. Bench marking is a procedure that requires the dispatcher to contact the incident commander at predetermined intervals. This allows the incident commander to understand how far into the incident they are and provides a time stamp for assessing incident progress and personnel safety.

### **Run Cards**

In August of 2014 the Lebanon Fire Department and Hanover Dispatch began working on a water rescue run cards. These run cards would provide greater resource capabilities for response to water rescue incidents. Water Rescue incidents are low frequency/high risk incidents that require significant personnel resources.

Run cards have been tiered to only send the necessary resources based on the call type and information provided by the caller. Another benefit to developing these run cards was the mapping and tagging of GPS coordinates of accessible access points for hard boat launch and rafts to major bodies of water in the Upper Valley. These GPS coordinates included in the Active 911 system giving responders instant access to the nearest access point.

Last year both the States of New Hampshire and Vermont had some very large wild land fires. The Lebanon Fire Department responded to several in Vermont and sent a task force to Lakes Region in NH for large wild land fire. These wild land fires prompted the Lebanon Fire Department to assess our response capabilities for this type of emergency. This assessment led to the creation of a wild land specific run card to better identify the



regional resources available for this specialized type of response. Further, our 2016 department budget included equipment to better outfit personnel for managing wild fire incidents.

### **Citizens Academy**

The Lebanon Fire Department was only one of several city agencies that provided education to community members that attended the City of Lebanon Citizens academy. In 2015, the Lebanon Fire department provided an overview of the department's resources and a fire extinguisher training session. Participants were able to learn about different types of extinguisher and their proper use. After a brief classroom session participants were able to extinguish actual fires in burn pan.

### **First Aid/AED/CPR**

In May of 2015, Assistant Chief Libbey was approached by City of Lebanon Administration to teach both First Aid and Automatic External Defibrillator. The City had several employees attend the training which took place over two days.

In 2012, West Lebanon Feed and Supply received the S.H.A.R.P. (Safety and Health Achievement Recognition Program) designation by OSHA. This designation is awarded to companies who demonstrate a commitment to safety in the workplace. The Lebanon Fire Department has been able to contribute to this achievement by providing annual fire extinguisher training to all West Lebanon Feed staff. In August 11, 2015 West Feed and Supply requested assistance in training all of their staff on CPR/AED/First Aid. The Lebanon Fire Department was able to provide this training and certify all staff.

In May of 2015 the Fire Department also provided CPR/AED training to the City of Lebanon life guards. The lifeguards are a super group of students who provide exceptional service to the community of the City of Lebanon.

### **Fire Extinguisher Training**

The Lebanon Fire Department continues to offer and deliver fire safety training throughout the community. This training consists of the following: how to activate an



onsite fire alarm system to notify building occupants of an emergency, the importance of follow-up notification of the fire department via 911, and includes classroom and live-fire extinguisher training sessions. In 2015 the department provided classes to:

- West Lebanon Feed and Supply
- Timken
- Hypertherm
- Kilton Library
- Pro-cut International X2
- Lebanon Department of Public Works
- Mumley Law offices

Many of these local businesses have made financial donations to the fire department for this training. With these donations the department was able to purchase a new fire extinguisher training prop. This new prop is more environmentally friendly and reduces the staff needed to conduct training sessions.

### **Job Shadow**

On April 2, 2015, the Lebanon Fire Department participated in the annual middle school Job Shadow Day by hosting two eighth grade students that were interested in becoming a Firefighter or Emergency Medical Technician. The students spent time in the fire inspection division, learned about self contained breathing apparatus, utilized vehicle extrication tools, and learning about Aircraft Rescue Firefighting. Job shadow is something that the department has done for the past 10 years.

### **Apparatus**

In October the department took delivery of a new 2015 Ford F550 4x4 with a 40 foot telescopic /articulating platform lift bucket truck. The new bucket truck is used by the fire alarm division for the maintenance of citywide copper and fiber optic communications system. This vehicle provides better stabilization, safety, and visibility. The truck is also equipped with newer technology to facilitate safer material handling and an insulated boom for the safety of our personnel.

**Firehouse Payroll**

The Lebanon Fire Department has been working to better leverage the capabilities of our station management software, FireHouse Software. One major initiative this past year was to begin integrating department payroll into this system. This will streamline department payroll processing, reduce payroll errors, and reduce administrative time associated with payroll processing. In 2016 we will work to implement this system and begin integration into the city's payroll processing system.

**Personal Protective Equipment:**

Personal protective equipment (PPE) is critical to the success and safety of our members and citizens. The Lebanon Fire Department utilizes nationally recognized standards along with manufactures recommendations on PPE care, testing, maintenance and replacement. The following is a list of equipment that has increased members safety.

- **Structural Firefighting Gloves**

This newer style glove is made of reinforced materials and provides the user with a higher dexterity. The gloves also come with a life time warranty on structural damage.

- **Wildland Firefighting Helmets**

The newer style helmets are lighter weight and allow more comfort for longer periods of time while hiking in steep and often times uneven terrain carrying loads of equipment and portable water supply's

- **Winter Coats**

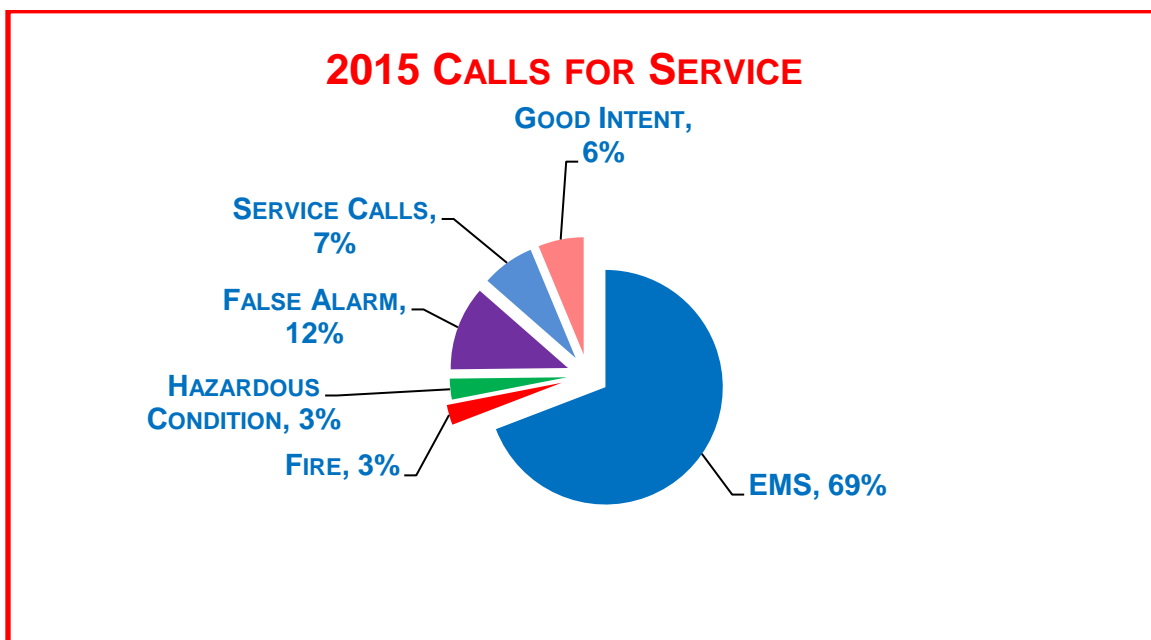
Emergency responses often occur during in climate weather conditions. In order to provide warm and dry response clothing along with high visibility, the department purchased Tactical EMS Response Parka's. These coats are equipped with rugged water proof outer shell and removable fleece lining. The coats also meet the requirements for reflective stripping as required by federal mandate.





**By the Numbers**

The following are statistics related to the annual calls for service and do not reflect the other non-emergency activities of our personnel. Department personnel perform thousands of hours each on training, vehicle, equipment, and building maintenance, conducting station tours, community events, and public education.





## Lebanon Fire Department

## Incident Type Report (Summary)

Alarm Date Between {01/01/2015} And  
{12/31/2015}

Incident Type	Count	Pct of Incidents	Total Est Loss	Pct of Losses
<b>1 Fire</b>				
100 Fire, Other	3	0.09%	\$2,700	0.87%
111 Building fire	16	0.50%	\$248,650	80.66%
1111 Fire In Building with no building involvement	4	0.13%	\$6,100	1.97%
113 Cooking fire, confined to container	25	0.79%	\$1,158	0.37%
114 Chimney or flue fire, confined to chimney or flue	2	0.06%	\$0	0.00%
116 Fuel burner/boiler malfunction, fire confined	2	0.06%	\$1,000	0.32%
118 Trash or rubbish fire, contained	1	0.03%	\$0	0.00%
131 Passenger vehicle fire	9	0.28%	\$45,650	14.81%
140 Natural vegetation fire, Other	6	0.19%	\$0	0.00%
141 Forest, woods or wildland fire	3	0.09%	\$0	0.00%
142 Brush or brush-and-grass mixture fire	4	0.13%	\$0	0.00%
143 Grass fire	1	0.03%	\$0	0.00%
151 Outside rubbish, trash or waste fire	3	0.09%	\$0	0.00%
154 Dumpster or other outside trash receptacle fire	4	0.13%	\$50	0.01%
160 Special outside fire, Other	2	0.06%	\$25	0.00%
170 Cultivated vegetation, crop fire, Other	3	0.09%	\$200	0.06%
	<b>88</b>	<b>2.77%</b>	<b>\$305,533</b>	<b>99.12%</b>
<b>2 Overpressure Rupture, Explosion, Overheat(no fire)</b>				
200 Overpressure rupture, explosion, overheat other	2	0.06%	\$0	0.00%
210 Overpressure rupture from steam, Other	1	0.03%	\$0	0.00%
211 Overpressure rupture of steam pipe or pipeline	1	0.03%	\$0	0.00%
251 Excessive heat, scorch burns with no ignition	4	0.13%	\$200	0.06%
	<b>8</b>	<b>0.25%</b>	<b>\$200</b>	<b>0.06%</b>
<b>3 Rescue &amp; Emergency Medical Service Incident</b>				
300 Rescue, EMS incident, other	8	0.25%	\$0	0.00%
311 Medical assist, assist EMS crew	4	0.13%	\$0	0.00%
3112 Lift assist	2	0.06%	\$0	0.00%
320 Emergency medical service, other	21	0.66%	\$0	0.00%
321 EMS call, excluding vehicle accident with injuries	91	62.59%	\$0	0.00%
322 Motor vehicle accident with injuries	97	3.05%	\$0	0.00%
323 Motor vehicle/pedestrian accident (MV Ped)	10	0.31%	\$0	0.00%
324 Motor Vehicle Accident with no injuries	61	1.92%	\$0	0.00%
340 Search for lost person, other	1	0.03%	\$0	0.00%
341 Search for person on land	1	0.03%	\$0	0.00%
350 Extrication, rescue, Other	2	0.06%	\$0	0.00%
353 Removal of victim(s) from stalled elevator	2	0.06%	\$0	0.00%
356 High-angle rescue	1	0.03%	\$0	0.00%
362 Ice rescue	1	0.03%	\$0	0.00%

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## Lebanon Fire Department

## Incident Type Report (Summary)

Alarm Date Between {01/01/2015} And  
{12/31/2015}

Incident Type	Count	Pct of Incidents	Total Est Loss	Pct of Losses
<b>3 Rescue &amp; Emergency Medical Service Incident</b>	<b>2,203</b>	<b>69.25%</b>	<b>\$0</b>	<b>0.00%</b>
<b>4 Hazardous Condition (No Fire)</b>				
400 Hazardous condition, Other	6	0.19%	\$0	0.00%
410 Combustible/flammable gas/liquid condition, other	2	0.06%	\$0	0.00%
411 Gasoline or other flammable liquid spill	6	0.19%	\$0	0.00%
412 Gas leak (natural gas or LPG)	9	0.28%	\$0	0.00%
413 Oil or other combustible liquid spill	5	0.16%	\$2,500	0.81%
421 Chemical hazard (no spill or leak)	1	0.03%	\$0	0.00%
424 Carbon monoxide incident	7	0.22%	\$0	0.00%
440 Electrical wiring/equipment problem, Other	15	0.47%	\$0	0.00%
442 Overheated motor	2	0.06%	\$0	0.00%
444 Power line down	3	0.09%	\$0	0.00%
4443 Tree on Wire	3	0.09%	\$0	0.00%
4444 Transformer Problem	1	0.03%	\$0	0.00%
445 Arcing, shorted electrical equipment	7	0.22%	\$0	0.00%
480 Attempted burning, illegal action, Other	1	0.03%	\$0	0.00%
481 Attempt to burn	1	0.03%	\$0	0.00%
482 Threat to burn	1	0.03%	\$0	0.00%
	<b>70</b>	<b>2.20%</b>	<b>\$2,500</b>	<b>0.81%</b>
<b>5 Service Call</b>				
500 Service Call, other	103	3.24%	\$0	0.00%
510 Person in distress, Other	7	0.22%	\$0	0.00%
511 Lock-out	5	0.16%	\$0	0.00%
520 Water problem, Other	6	0.19%	\$0	0.00%
5201 Water problem	2	0.06%	\$0	0.00%
521 Water evacuation	1	0.03%	\$0	0.00%
522 Water or steam leak	21	0.66%	\$0	0.00%
531 Smoke or odor removal	7	0.22%	\$0	0.00%
541 Animal problem	1	0.03%	\$0	0.00%
542 Animal rescue	3	0.09%	\$0	0.00%
550 Public service assistance, Other	15	0.47%	\$0	0.00%
551 Assist police or other governmental agency	7	0.22%	\$0	0.00%
552 Police matter	2	0.06%	\$0	0.00%
553 Public service	13	0.41%	\$0	0.00%
554 Assist invalid	26	0.82%	\$0	0.00%
561 Unauthorized burning	5	0.16%	\$0	0.00%
571 Cover assignment, standby, moveup	6	0.19%	\$0	0.00%
5711 Mutual aid to the scene	1	0.03%	\$0	0.00%

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## Lebanon Fire Department

## Incident Type Report (Summary)

Alarm Date Between {01/01/2015} And  
{12/31/2015}

Incident Type	Count	Pct of Incidents	Total Est Loss	Pct of Losses
<b>5 Service Call</b>				
	231	7.26%	\$0	0.00%
<b>6 Good Intent Call</b>				
600 Good intent call, Other	69	2.17%	\$0	0.00%
611 Dispatched & cancelled en route	90	2.83%	\$0	0.00%
621 Wrong location	1	0.03%	\$0	0.00%
622 No Incident found on arrival at dispatch address	10	0.31%	\$0	0.00%
631 Authorized controlled burning	4	0.13%	\$0	0.00%
650 Steam, Other gas mistaken for smoke, Other	1	0.03%	\$0	0.00%
651 Smoke scare, odor of smoke	9	0.28%	\$0	0.00%
6511 Odor Check	8	0.25%	\$0	0.00%
653 Smoke from barbecue, tar kettle	1	0.03%	\$0	0.00%
671 HazMat release investigation w/no HazMat	6	0.19%	\$0	0.00%
	199	6.26%	\$0	0.00%
<b>7 False Alarm &amp; False Call</b>				
700 False alarm or false call, Other	10	0.31%	\$0	0.00%
710 Malicious, mischievous false call, Other	1	0.03%	\$0	0.00%
711 Municipal alarm system, malicious false alarm	6	0.19%	\$0	0.00%
712 Direct tie to FD, malicious false alarm	1	0.03%	\$0	0.00%
714 Central station, malicious false alarm	1	0.03%	\$0	0.00%
730 System malfunction, Other	43	1.35%	\$0	0.00%
731 Sprinkler activation due to malfunction	25	0.79%	\$0	0.00%
732 Extinguishing system activation due to malfunction	1	0.03%	\$0	0.00%
733 Smoke detector activation due to malfunction	43	1.35%	\$0	0.00%
7331 Detector activation due to malfunction	3	0.09%	\$0	0.00%
734 Heat detector activation due to malfunction	3	0.09%	\$0	0.00%
735 Alarm system sounded due to malfunction	9	0.28%	\$0	0.00%
736 CO detector activation due to malfunction	6	0.19%	\$0	0.00%
740 Unintentional transmission of alarm, Other	66	2.07%	\$0	0.00%
741 Sprinkler activation, no fire - unintentional	21	0.66%	\$0	0.00%
743 Smoke detector activation, no fire - unintentional	51	1.60%	\$0	0.00%
744 Detector activation, no fire - unintentional	20	0.63%	\$0	0.00%
7441 Detector activation, no medical- unintentional	3	0.09%	\$0	0.00%
745 Alarm system activation, no fire - unintentional	13	1.35%	\$0	0.00%
746 Carbon monoxide detector activation, no CO	13	0.41%	\$0	0.00%
	369	11.60%	\$0	0.00%

**8 Severe Weather & Natural Disaster**

03/24/2016 08:54

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## Lebanon Fire Department

## Incident Type Report (Summary)

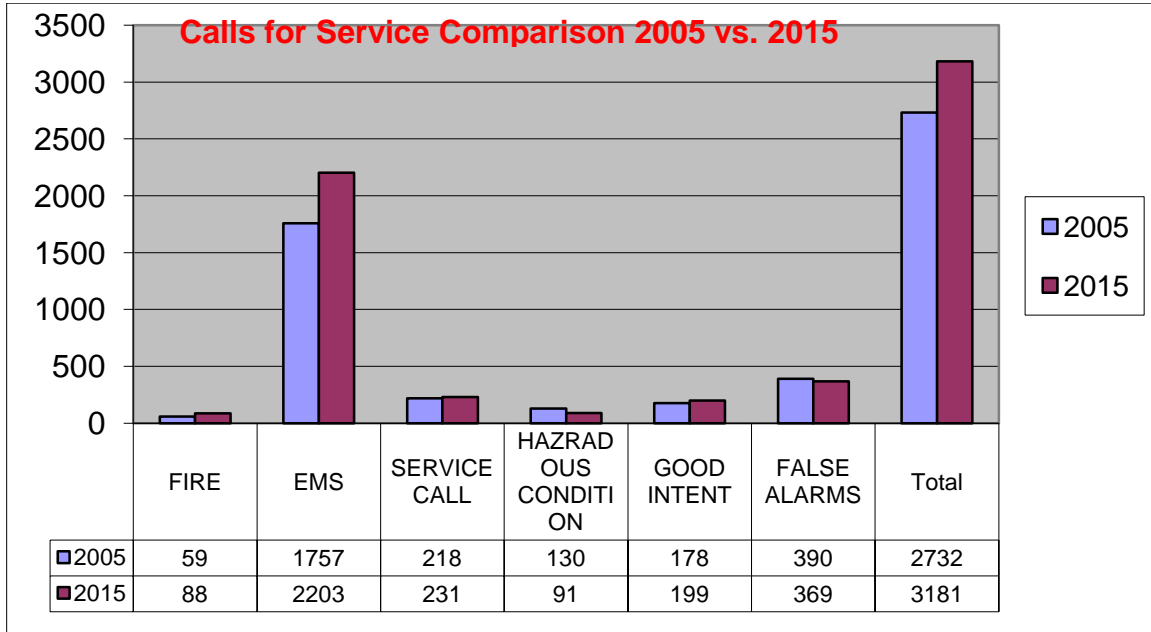
Alarm Date Between {01/01/2015} And  
{12/31/2015}

Incident Type	Count	Pct of Incidents	Total Est Loss	Pct of Losses
8 Severe Weather & Natural Disaster	1	0.03%	\$0	0.00%
9 Special Incident Type				
900 Special type of incident, Other	1	0.03%	\$0	0.00%
911 Citizen complaint	11	0.35%	\$0	0.00%
	12	0.38%	\$0	0.00%
Total Incident Count: 3181			Total Est Loss: \$308,233	

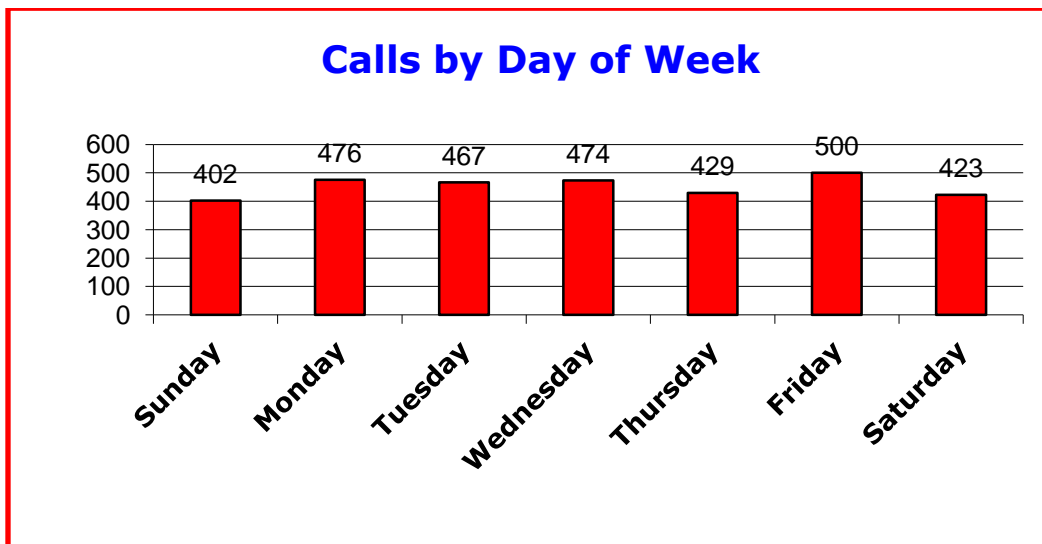
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The following compares the types of calls for service from 2005 to 2015. Calls for emergency medical service have increased 25.4% in ten years.

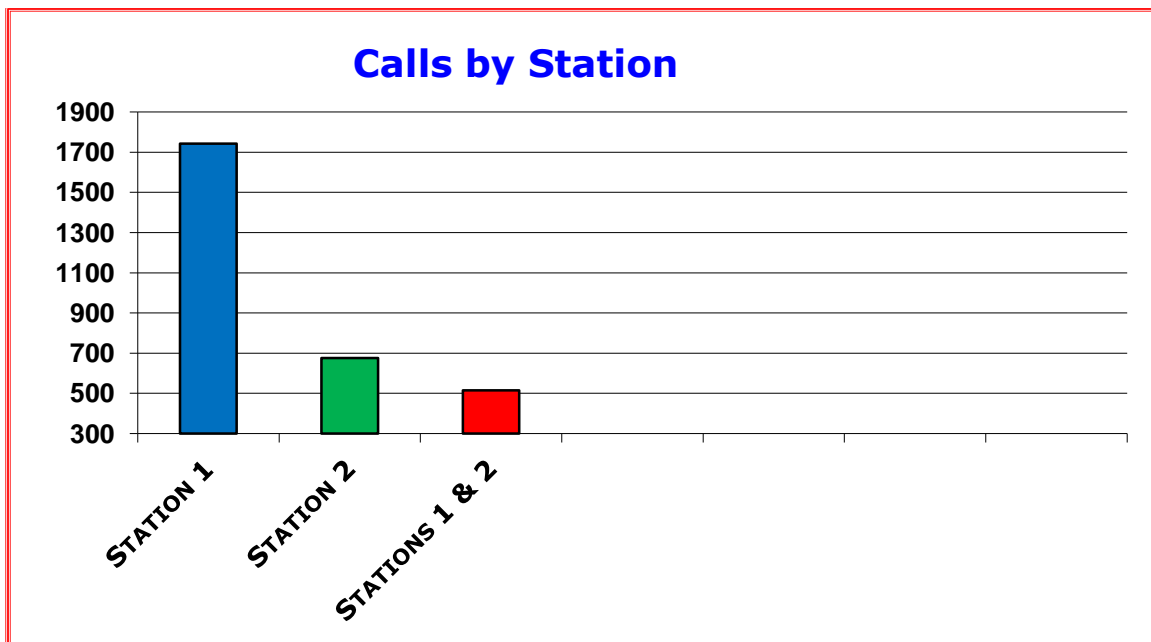


The following chart shows the distribution of the calls for service by day of the week. The busiest days are Monday through Friday, which can be attributed to the increase in commuter population (estimated at 30,000 people per day).





Station 1 responds to the majority of the calls for service annually. This is likely due to the response to Enfield and portions of Plainfield and Meriden under our agreement to provide ambulance service.



### **2015 MAJOR INCIDENTS**

- ❖ January 23 – units responded to the new construction site at Quail Hollow for a report of a building fire. On arrival units found an active fire on the second floor decking. The fire was quickly extinguished and the building suffered minimal damage. The cause was determined to be from a space heater which was left on to keep highly flammable flooring adhesive warm.
- ❖ May 8 – department personnel were deployed to Northfield, NH for a large wildland fire. This deployment was at the request of the local Incident Commander as a part of the Statewide Mutual Aid Assistance plan. The Strike team consisted of personnel from Claremont, Enfield, Hanover, and Lebanon.



**Car Fire - Mechanic Street**





- ❖ June 3 – units responded to Dartmouth Hitchcock Medical Center for a report of a fire on the roof. On arrival personnel found an area of roofing near an air handling unit that had burnt. The fire was extinguished by DHMC security and maintenance staff. The roofing material was removed and there was no extension into the roof deck. Personnel were assisted by the Hanover, NH and Hartford, VT Fire Departments.



**Lightening Strike - Rio Vista**

- ❖ July 30 – units responded to Rio Vista for a report of a building possibly struck by lightning. On arrival and investigation personnel found evidence of a lightning strike on the front of the building and a light odor of wood burning. Upon further investigation personnel found an active fire in the attic space. The fire was quickly extinguished but required extensive overhaul.

- ❖ December 11 – units responded to Kleen Laundry on Foundry Street for a report of a leak in their liquefied natural gas system. Personnel stood by until maintenance personnel could isolate and repair the leak.



**Kleen LNG Leak**



**Motor Vehicle Crash - Route 12A**





## EMERGENCY MEDICAL SERVICES

The Lebanon Fire Department provides Emergency Medical Services (EMS) and Transporting Advanced Life Support to Lebanon, Enfield, Grantham, and Plainfield. We also exchange Mutual Aid EMS, primarily with Hanover and Hartford, Vermont. All Fire Department employees are trained as both Fire Fighters and Emergency Medical responders. We currently employ 18 Paramedics, 7 Advanced Emergency Medical Technicians, and 4 Emergency Medical Technicians who provide exceptional pre-hospital care. All employees are Nationally Certified and licensed by the State of New Hampshire to provide medical care. A high priority is placed on maintenance of Certifications and Licensure; providers must complete between 40 and 60 hours (depending on certification level) of biannual training to recertify and relicense.

Paramedics provide Advanced Life Support care using state of the art equipment and evidence based treatment guidelines under which all providers operate. These guidelines or “protocols” are consensus derived by a State Committee



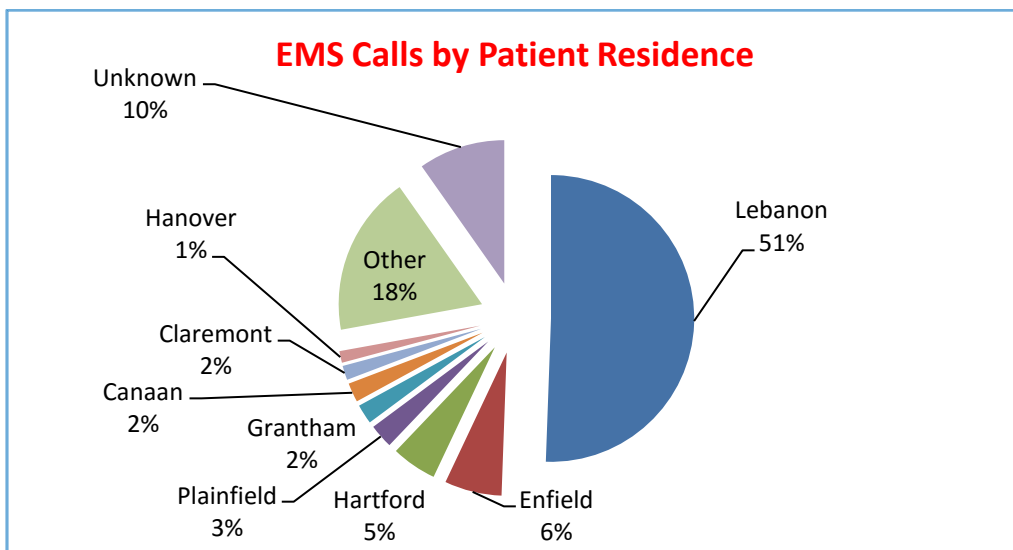
Current Medications

which includes Physicians, Pharmacists, subject matter experts, and EMS providers including Lebanon Fire Fighter/Paramedic Matt Fulton. These guidelines are continually reviewed for effectiveness, critical updates are issued immediately with full revisions released biannually, keeping New Hampshire on the cutting edge of pre-hospital medicine.



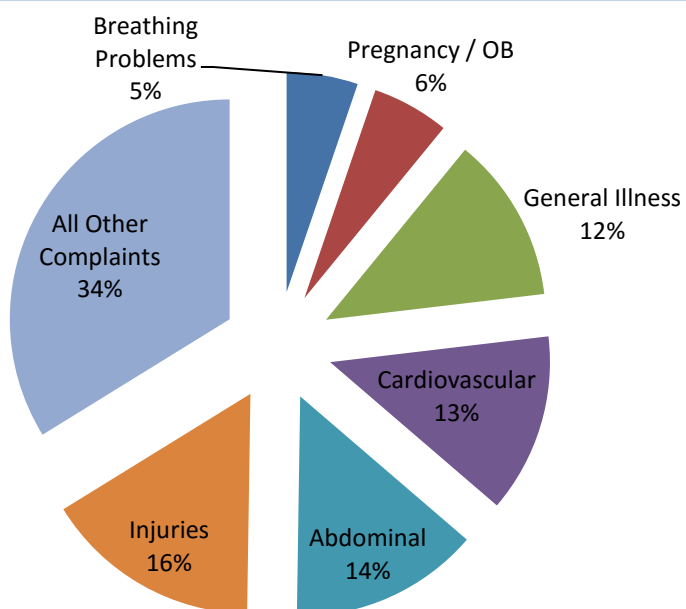
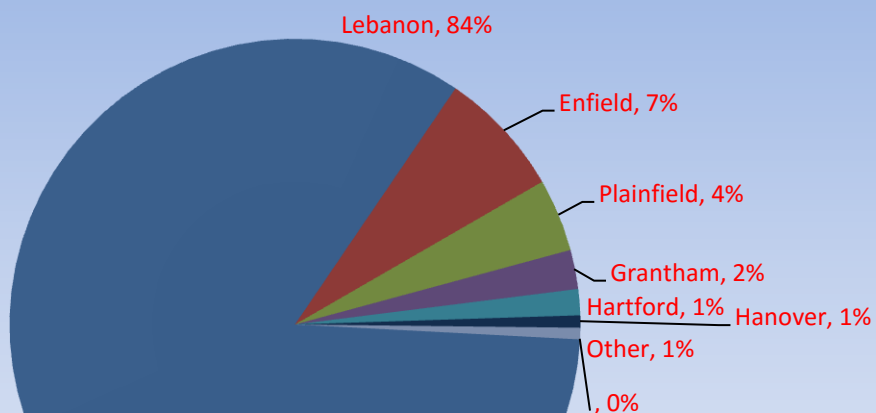
In addition to exceptional treatment guidelines, Lebanon Paramedics have at their disposal advanced pre-hospital medications and equipment including IV Pumps and transport ventilators. IV pumps dramatically increase the accuracy of medication administration and allow Paramedics to administer medications that without pumps simply aren't permitted. Transport ventilators provide incredibly accurate and comprehensive respiratory support. Lebanon Paramedics carry and are authorized to administer more than 35 pre-hospital medications which save lives and increase patient comfort. The IV Pumps and Ventilators were obtained through partnership with Alice Peck Day Memorial Hospital and the New Hampshire Department of Health and Human Services respectively; our community is fortunate to have these partners.

In 2015, the Fire Department responded to 2303 calls for Emergency Medical Services, making 2355 patient contacts. Seventy percent (1652) of the patients we encountered were transported to healthcare facilities; 54% of those patients received Advanced Life Support (ALS) care and 46% received Basic Life Support Care. Basic Life Support (BLS) care includes non-invasive treatments while ALS includes treatments such as Intravenous (IV) therapy, medications, advanced airway management, and cardioversion. BLS care can be rendered by all providers while ALS care is rendered only by Advanced Emergency Medical Technicians and Paramedics.





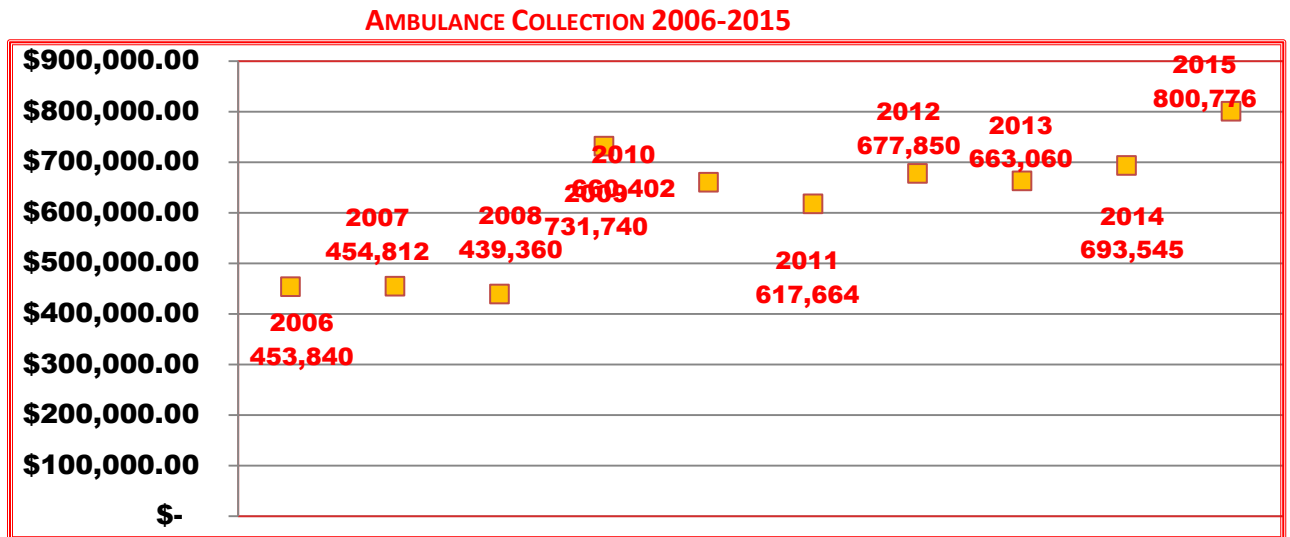
### EMS Responses by Community



### EMS Responses by Call Type



In 2014 the City Council approved an updated fee schedule for ambulance services. The biggest changes from the previous schedule was the “bundling” of previous side charges for ancillary services (I.e. oxygen, cardiac monitoring, etc.). The fees for Basic Life Support and Advanced Life Support 1 stayed the same and there was a small increase in the Advanced Life Support 2 rates and the city added a rate for Specialty Care Transport. Specialty Care Transports are typically from hospital to hospital and requiring enhanced Paramedic skills. Lastly, the city adopted a co-pay waiver of \$100 for residents. The following chart shows the trends in ambulance fees collected over the last ten years. There is a marked difference beginning in 2009 when the city changed our ambulance billing service contractor.





## TRAINING

### **Our Mission:**

*To provide all members of the Lebanon Fire Department, regardless of rank or experience, with training that will allow them to perform safely and with the highest level of competence.*

### **Our Vision:**

*To construct and facilitate a 21<sup>st</sup> century Fire/ EMS training program that meets the needs of the citizens of Lebanon and the members of the Lebanon Fire Department. This program will encourage teambuilding, problem solving, and consistent service delivery. This program will be built, facilitated, evaluated, and revised through unified leadership.*

### **Core Values:**

*Safety*

*Consistency*

*Fairness*

*Always reinforce the basics*

*Make the next generation better than we are*

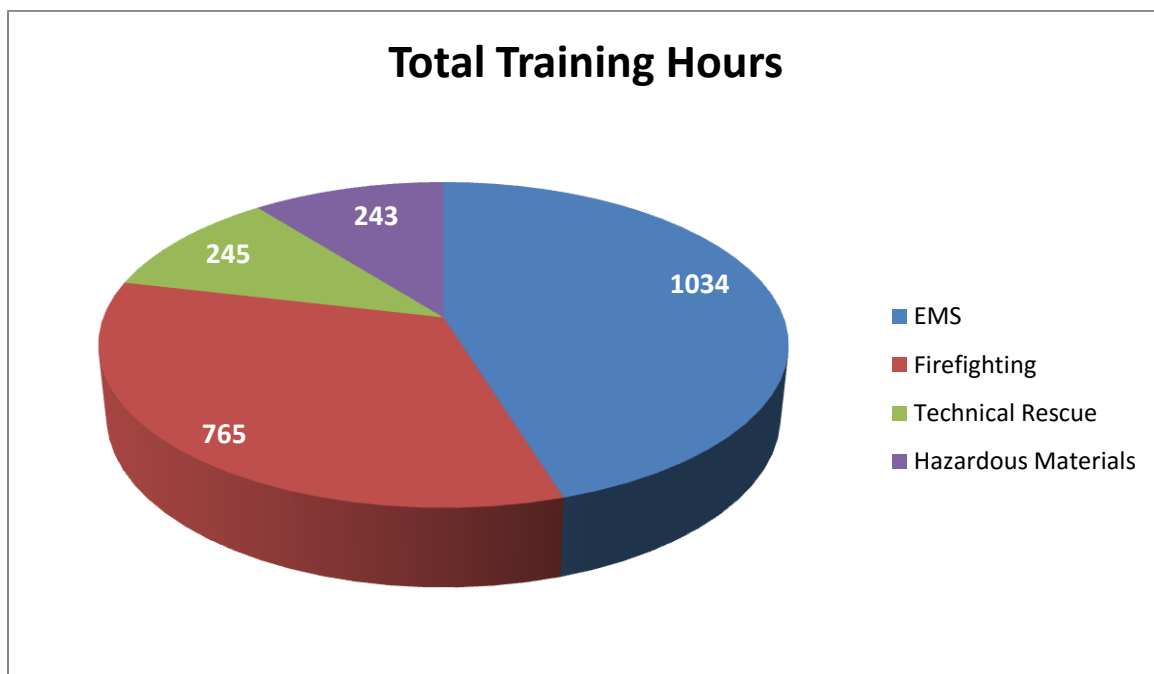
*Always strive for a higher level of competency*

*Respect tradition while embracing change*



The training division in its entirety is overseen by the Assistant Fire Chief and managed on a day to day basis by a shift level Captain. The responsibility of the training division is to develop, facilitate and track Fire, EMS, Hazmat and Technical Rescue training for all members career and paid on call. Training is an essential piece of any fire department to insure effective service delivery and the safety of the citizens and firefighters.

The Lebanon Fire Department continues to be extremely busy responding to complex emergency calls on a daily bases that require specialized training. Throughout the course of a year members participate in various in house and external training sessions. Do to our geographic area of coverage we rely heavily on mutual aid responses from neighboring communities. In the past year there has been a new effort to participate in training with other organizations on both the shift and departmental level. This provides members with an understating of how our mutual aid departments will operate and how they are equipped. In 2015 The Lebanon Fire Department participated in Live Fire Training, Swift Water Rescue Training and various company level drills with local mutual aid departments. A snap shot of total training hours by discipline can be seen below.



**Probationary Completion:**

Three members successfully completed their probationary programs and obtained permanent status.

**Professional Development Training:**

One member completed his Fire Officer Designation through the Center for Public Safety Excellence.

One member completed his first year, of a two year Managing Officer Program and the National Fire Academy.

Two members obtained Their Fire Officer II Certification.

Two members obtained Their Fire Officer I Certification.

**Technical Rescue:**

One member obtained Confined Space Rescue Certification.

One member obtained Swift Water Rescue Technician Certification.

Two members obtained certification in Large Animal Water Rescue.

**Quarterly Department Drills:**

The Lebanon Fire Department hosts quarterly drills in which the whole department as well as mutual aid partners can participate in large scale training evolutions. The topics that were covered in 2015 are as follows.

- Swift Water Rescue Drill – 4 hours
- Rural Water Supply Drill- 4 hours
- Rope Rescue Drill- 4 hours
- Mayday/RIT Drill 4- hours
- Live Fire Training- 8 hrs

**Specialty Outside Training**

Two members attended training titled Active Threat Integrated Response Course (ATIRC). This program was an introduction to EMS and Police integrated response to active shooter events. These two individuals will next obtain a trainer certification in this program and will deliver a department wide training program in conjunction with Lebanon Police Department.

The Lebanon Fire Department was donated a house on Evans Drive for live fire training. This type of training is invaluable as it allows members to participate in as close to real fire conditions as possible. In addition to this session 8 members also attended automatic aid training with Hartford Vermont Fire Department and Hanover New Hampshire Fire Department. This training was conducted at Vermont Technical College in Randolph Vermont and covered combined operations at structural fires.

The Lebanon Fire Department also has taken an active role in health and wellness of its members. This year the department sponsored one member to obtain his Crossfit level 1 certification. Cross fit is a unique new exercise model that combines high intensity aerobic training with strength training. This type of exercise proves to be very functional for the demands of firefighters.

**Grant Funded Training:**

10 members of the department participated in a 16 hour grant funded Hazmat Technician refresher sponsored by the New Hampshire Fire Academy and hosted here in Lebanon.

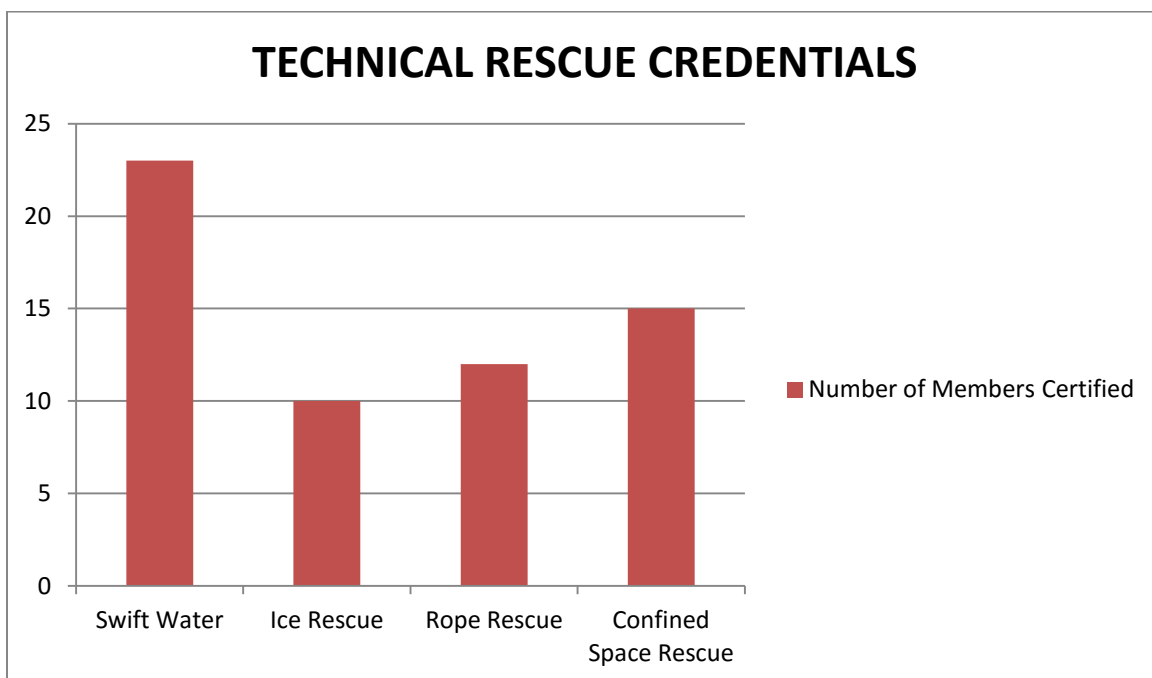
The entire organization participated in a joint training with Hartford and Hanover Fire Departments which covered responding to rail road emergencies. This program was 6 hour awareness level program that was hosted at the Hartford Fire Department and White River Junction Rail Yard.





**TECHNICAL RESCUE:**

The Lebanon Fire Department has made a continued commitment to providing specialized technical rescue to the community and region. This year the department took delivery of 16 ft cargo trailer in which all of the technical rescue equipment is stored. This trailer allows for rapid deployment of any of the necessary resources, as well as a safe and organized storage system to protect our investment. Currently members are trained in Swift Water Rescue, Confined Space Rescue, Rope Rescue and Ice Rescue.





## FLEET MAINTENANCE

This report is a general overview of fleet maintenance work as completed by either the Department or outside vendors as needed. For ease of reading it is listed by each vehicle in the Lebanon Fire & EMS Fleet.

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**Car#1** a 2015 Ford Explorer all wheel drive vehicle, was placed into service on 07-15-2015. This vehicle serves as the Chief of the Departments emergency response



unit. It is set up to be a mobile command post with radio and is equipped with computer communications. The former Car#1 a 2009 Ford Taurus has been sent to the Department of Public works for their use as needed.

**Car#2** a 2008 model year Ford Taurus used by Department Assistant Chief. This vehicle also serves as transportation for member's attending outside training classes. Regular maintenance and services performed. This includes major work on the braking system. There is the start of some corrosion forming on the unit which may need attention soon. This vehicle is due to be replaced in 2017.

**Car#3** a 2007 model year Ford Expedition used by Fire Inspectors. This vehicle had significant rusting issues and did not pass state motor vehicle inspection in 2015. It was sent out for repairs and then was able to be inspected. Currently this unit is being replaced in the year of 2016.

**Car#4** a 2008 model year Ford Escape used by Fire Inspectors. Regular maintenance, brakes, engine and exhaust system repairs and tires replaced. The engine required a tune up per manufactures specifications. This vehicle is due to be replaced in 2017.



**Utility#1** a 2011 model year Ford F-350 Pick-up Truck used by Station#1 personnel. This vehicle serves as a first response vehicle, personal transport, and as a hauling and towing unit. It is also equipped with a snow plow for use during extreme weather situations. Regular maintenance was performed with no other issues this year.

**Utility#2** a 1990 model year Ford F-350 Bucket truck used by all City Departments was replaced this past year, a new 2015 Ford F550 4X4 unit. The bucket truck is to maintain the city's radio, fire alarm and fiber optic cabling



system and other uses as requested.

**Engine#1** a 2000 model year American LaFrance Fire Engine. Regular maintenance, brake & suspension, electrical system, pump piping & pump components were repaired this year. It received a major servicing on the engine and transmission. The radiator required replacement this past year. Due to the size of the job it was sent to an outside vendor for repairs. Annual pump testing was completed and the pump passed.

**Engine#2** a 2007 model year E-One Fire Engine. Regular maintenance was conducted this past year. New rear springs were placed onto the unit and annual pump testing was completed. The pump passed the testing this year.

**Engine#4** a 1995 model year Smeal Fire Engine. Regular maintenance was done with a servicing of the fire pump again this year. This required the rebuilding of several valves on the fire pump. This pump was tested and passed.

**Ladder#1** a 1990 model year E-One Ladder truck. Regular maintenance, annual testing of Aerial Ladder were completed. The unit spent almost 30 days out of service due to a transmission leak. It was found the transmission retarder which helps in slowing the vehicle was the cause of the leak. Due to the complex nature of the repairs, the unit was system for refilling breathing air cylinders also received regular maintenance.



**Rescue#1** a 1991 model year Ford L-8000 E-One Rescue truck. Regular maintenance, repairs to the battery charging system were done this past year. The on- spot chain system was repaired and serviced.

**Ambulance#1** a 2012 model year Ford F-550 Lifeline Ambulance. This unit was received new and placed into service to Lebanon in November 2012. Annual maintenance was completed with no major issues this past year for this unit.

**Ambulance#2** a 2008 model year Ford E-450 Road Rescue Ambulance. This unit was formally Ambulance#1. Regular maintenance on the brake & suspension, exhaust, engine and transmission was completed this past year. The engine received a major overhaul after several break downs. This unit is scheduled to be replaced in 2016.

**Ambulance#3** a 2014 Ford F-550 Lifeline Ambulance received regular maintenance and several manufactures required updates. There were no significant issues this past year.

**Gator#1** a 2010 model year John Deere utility vehicle. This unit is used for wild land fire suppression, and back country search and rescue missions. This vehicle was also used by the Lebanon Police Department to search the rail trail for a missing youth.. Regular maintenance was completed with no major issues this past year.

**Boat#1** a 2010 model year Zodiac Rescue Boat. This is used for water emergencies on rivers and lakes in Lebanon and throughout the region for our swift water rescue team. Regular maintenance was completed this past year.

**Truck#2** a 2014 E-One HP75 Quint fire apparatus was placed into service in April 2014. Truck#2 is a second ladder truck for the City and was added to address new multi-story construction in West Lebanon. A Quint fire truck carries water and can pump like a fire engine. It also has a fixed mount 75 foot aerial ladder. This allows for greater options by the first arriving crew members as to which operational mode they start with. The Aerial ladder was tested and passed inspection. All ground ladders were tested as well and passed also. Annual pump testing was completed and passed without any issues. This unit is housed in the West Lebanon Fire Station.



Fire apparatus are now on an annual inspection schedule as required. Formerly each emergency vehicle other than domestic cars and trucks were inspected twice each year. All Fire Engine Fire Pumps were tested by an outside service and passed. All Department ground ladders were tested along with both Aerial Ladders.

All department fire hose, over 6,000 feet are tested annually by on-duty personnel. When a length of hose fails it is removed from service to protect against injury or failure during an emergency. With the purchase of Truck#2 in 2014 several new lengths of four inch supply line were replaced.

The Fleet Maintenance Division is also tasked with maintaining and repairing all hand and power tools. Several chain saws, generators and other mechanical tools were sent out and serviced this past year. All hand tools were checked for defects and repaired or replaced as needed. Progress continues on the computerization of all maintenance records and servicing needs.



## BUILDING MAINTENANCE

This division is managed by one of the shift Captains and is responsible for ensuring that all department facilities are maintained. In order for an equipped force to be immediately available, strategically located Stations must be available to provide shelter for personnel, apparatus and those services necessary to support them.

The Lebanon Fire Department Operates out of two main fire stations, providing 24/7 coverage. Station one is located at 12 South Park Street and houses the administrative offices and 3-4 on duty personnel. Station 2 is located at 63 Main Street providing 24/7 coverage with 2 personnel. Station 1 and 2 are both aging facilities that our needs are quickly exceeding. We have begun the brainstorming process to develop of remediation for some of the concerns with the facilities and hopefully improve energy efficiency and functionality while providing a professional appearance for the community. In addition to the primary stations the department utilizes a 3<sup>rd</sup> station located on Dartmouth College Highway and is primarily utilized for equipment storage.

### Station 1:

Station 1 was built in 1954 and continues to serve as the central fire station. This station houses a majority of the apparatus as well as the administrative offices. As this facility continues to age, it will require significant upgrades and renovations to become operationally cost effective. Modern apparatus

is being built much larger than in the past and is making it difficult to purchase equipment that will fit in the main fire station. In addition to structural design the building is in desperate need of many electrical and plumbing updates.



A new lectern and smart board were installed in the EOC/Training Room at station 1. This enhances the functionality of the EOC and modernizes the ability to deliver quality



training programs and lectures by staff members and outside training guests. In addition to the new media equipment, new data cable was routed from the first floor to second floor to allow stronger web access for computers operating in the EOC.

As we continue to increase our EMS capabilities it requires us to have more critical supplies on hand that require additional security. To accommodate this, the EMS vault has been equipped with a locking door and electrical access to support the instillation of a space heater and refrigeration unit so that medications and equipment are stored in proper conditions. The reorganizing of the EMS Vault it required additional space to store excess items. This was accomplished by removing a bathroom from the first floor of the station and turning it into a storage closet.

### **Station 2:**

Station 2 has had increased demands placed on it in the last 15 years with 24 hrs staffing in the station. While the maintenance costs are much less than station one there are still issues that need immediate attention. The floor drainage



system has continuously presented clogging and backup issues. This required a portion of the floor to be removed which revealed a damaged drainage pipe, likely caused from aging and weight on the floor. The problem was remediated and now functions correctly.

The size of station 2 is relatively small and requires the Personal Protective Equipment (PPE) to be stored in close proximity to the diesel powered apparatus. Recent studies have indicated that a significant link to occupational cancer in the fire service can be tied to diesel fumes being embedded in PPE. Although the station has a well maintained and operated exhaust removal system, the risk is still present.





## FIRE ALARM AND COMMUNICATIONS

### MUNICIPAL FIRE ALARM and COMMUNICATIONS SYSTEM

The Municipal or City Fire Alarm System consisting of wires, communication cable, street boxes, master boxes, alarm panel and alarm receivers provides the community with a reliable system for automatic reporting of emergencies. They are transmitted over this system and sent to the "Dispatch Center" where the alarm is transmitted to the proper emergency responders for mitigation.

The City of Lebanon owns and maintains a public fire alarm system. The system was originally installed in the summer of 1898 at an expense of \$2,000. The Municipal Fire Alarm Telegraph system provides supervised public alarm service through the fire alarm boxes located on the streets. It also provides alarm services to public and private buildings when a fire alarm box is connected to a building's fire alarm system as well as emergency notification from the Lebanon Communications Center to the Central Fire Station. The reliability of this type of alarm system is still unsurpassed. The system consists of more than 60 miles of wire, 40 miles of which is multi-use communications cable, which is used for other municipal communications services. There are currently over 300 alarm boxes providing reliable protection and early notification for over 650 million dollars of property.

### FIBER OPTIC

In 2006 the City expanded our copper fire alarm system by over lashing fiber optic cable. The installation provided the City with a multi-use communications cable system. The Fire Department has been able to provide all City Departments and Schools with point-to-point communication services. The entire computer interconnections between City Buildings are now using this cabling, the citywide phone system is run through this system, as well as all remote emergency radio controls. In 2007, the Fire Department began providing the School Supervisory Union fiber optic interconnections between its buildings, resulting in a substantial cost savings and greater reliability.





Being able to provide these services instead of contracting these interconnections from a private source has resulted in a cost savings of approximately **\$60,000 per year** by not having to lease Fiber Optic cable from a third party. The initial cost of the first phase of fiber was \$300,000 and therefore a 5-year payback in the infrastructure costs. Additional savings have been realized by not having to lease expensive conditioned copper phone lines, which are required for all Fire and Police Radio bases. The only base radios in the city that are not on our own cable are the ones at Station 3 in East Lebanon. We are optimistic that these will be converted when the Fast Roads fiber is run to Enfield.

The additional benefit of this cable has been the consistent reliability of the connections. Since the installation of the cable to the areas of West Lebanon, we have found that there is increased demand for interconnections between City buildings and facilities, as well as a significant increase in the number of private buildings desiring to connect to the Municipal Fire Alarm System. Although we have been able to recover a portion of the costs of these connections and installations through fees, we have had to begin training additional personnel to assist in maintaining the cable plant and alarm system.

### **COMMUNICATIONS**

The Department must be able to communicate in all types of emergencies under all types of conditions. These emergency communications can range from a Firefighter inside a burning building calling for help, to the Chief co-coordinating Mutual Aid responses on several different radio channels. With this use, radios need constant maintenance to keep them running. With the installation of the new digital radio system, the communications has improved significantly. Lebanon Fire Station #1 also serves as the City's alternate dispatching center. In the event of a shutdown at the communications center at the Lebanon Police Facility, communications and 9-1-1 calls can still be received at Station #1. The Station also serves as the Emergency Operations Center.

**MAINTENANCE**

2015 was a slightly slower year for the Fire Alarm and Communications division. Our aging bucket truck surely showed its age, and was out of service for most of the year in anticipation on the delivery of our new truck. We were able to get some emergent work completed, as well as some scheduled work in between our mechanical breakdowns. Sometimes this work could not have been completed without the generosity and support (use of bucket truck) of the Utilities Maintenance division of Public Works, and or the Hanover Fire Department.

The year started off with the allocation of funds for a replacement bucket truck. Researching the new vehicle consisted of soliciting requests for proposals (RFP) from public works, as well as other area fire department's that utilize a bucket truck for Alarms and Communication work. With the most current information in hand and with the assistance and expertise of the Assistant Fire Chief, we constructed and refined our own RFP for a replacement bucket truck. Upon closure of the bidding process, we had received 4 bids for our new vehicle. The bid was ultimately awarded to RBG out of Raymond NH.

In working with the builder we were able to adjust and modify some of the more important details of the vehicle. This produced the most beneficial product for both the builder as well as the City, and we took delivery of the new vehicle and retired our old truck in October of 2015. Since delivery we have been in the process of laying out the particulars of the vehicle, equipment storage, radio placement, flashlights, etc. The end of the budget year allowed us the opportunity to purchase a few new tools to equip the vehicle that we did not previously own.

Most notable is the addition of a hydraulically operated impact drill and chainsaw. These were necessary improvements as the new truck has an insulated boom. This was a required improvement to the older bucket truck because of the length of the boom, 45 foot reach compared to the original 28 foot boom on the old vehicle. To maintain the insulating properties of the boom, non-conductive hydraulic fluid is used instead of electrical connections (wires) to operate tools. Whereas the previous vehicle was not



insulated we utilized a corded impact drill and saw, necessitating the purchase of the new tools to maintain compatibility and safety.

Throughout the year the Fire Alarm and Communication division worked with many of our utility partners. During the early part of the year we worked with Fairpoint Communications in the Centerra neighborhood when they were doing work on the underground system. During their work, they identified two flooded (because of poor drainage and excessive groundwater) manholes in Centerra that house part of the City's Fire Alarm system. Since those two manholes have been pumped out we have experienced a decrease in issues in and around that area of our system. During the same period we worked with Liberty Utilities to protect some of their low hanging electrical wires so necessary maintenance could be performed on aerial Fire Alarm wires.

Also during the spring last year while making a new connection to the system, a major deficiency was identified on the Route 4 circuit which services Bank Street/Mechanic Street. With the assistance of Fire Prevention personnel troubleshooting was conducted on that circuit. It was discovered that the issue was a short circuit near Slayton Hill that had caused the issue and was corrected in short order restoring normal service to the area.

Throughout the year there have been many requests for additional connections and service on the City owned Fiber Optic System. Through the generosity of the IT department this year, they have purchased us an optical time-domain reflectometer (OTDR). This test instrument is essential in the diagnosis of failures within the Fiber Optic System. We are currently trying to schedule training on the unit with the sales representative to be held in Lebanon. Some of our outstanding Fiber Optic issues that need attention this year will be to reestablish connectivity between the scale house at the Landfill and their administrative/maintenance garage.



Lastly we have been working with the Police Department Communications Center on issues related to Fire Department dispatching and radio issues. Over the last few months we have enjoyed tremendous progress in moving forward with such projects as updating our “Call for Service” sheets, a “May Day” drill that included dispatch, servicing of base radio equipment, reestablishing radio paging for early notification of other area dispatch centers. During the upcoming year we are very optimistic this progress will continue and further accomplishments can be achieved to better serve the citizens of Lebanon.



## FIRE PREVENTION

The Fire Prevention Division is responsible for the application and enforcement of both the State of New Hampshire Fire Code and the City of Lebanon locally adopted Fire Prevention Ordinance. Additionally, this division's two fire inspectors perform plan review for all new and some remodeling construction projects, field inspections, investigate citizen complaints, investigate all fires, and deliver public education programs.

2015 was a productive year for the Fire Prevention Bureau. The City was fortunate not to experience any major fire incidents, nor suffer any fire related fatalities or serious injuries in the year. It is apparent that the City's commitment to fire prevention efforts has had a positive impact on reducing fires over the past 10 years, especially in multi-family dwellings. It's noteworthy to report that there were no fires in apartment buildings in the City in 2015.

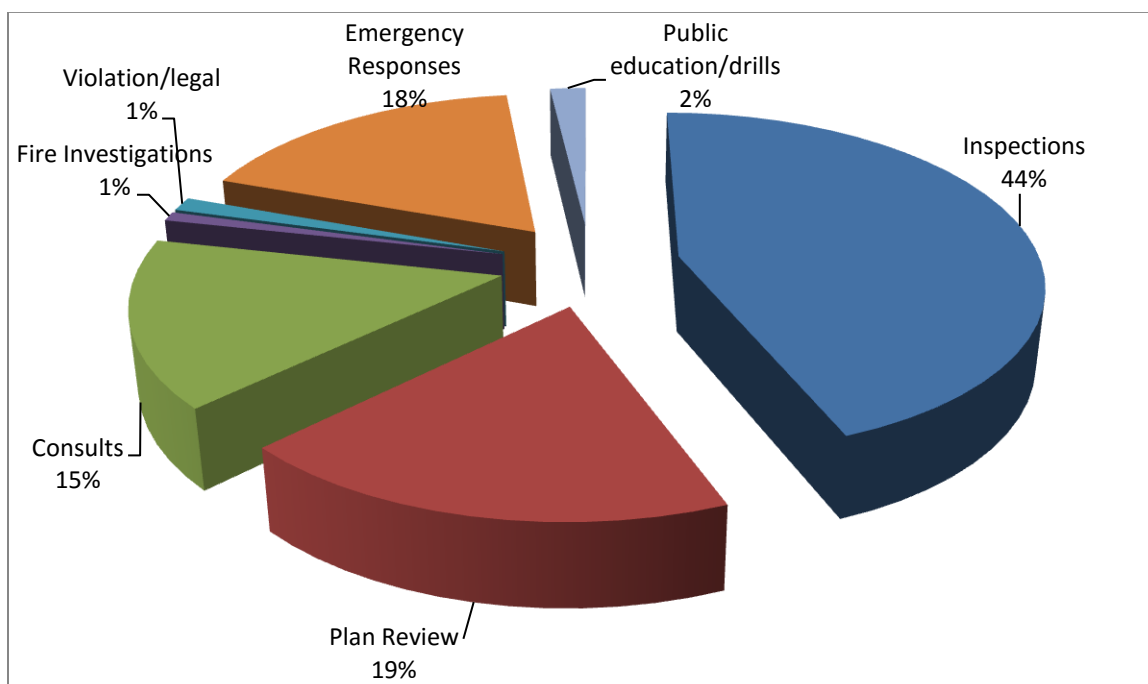
Nationally, fatal fire incidents continue to be a problem. After seeing an 11% decrease in fire fatalities between the years of 2002-2008, the fire fatality rate in the US has plateau'd and stayed flat with no appreciable drops in annual fire deaths since 2008, averaging 3,000 fatalities per year. 2015 was also a tragic year for fire fatalities in New Hampshire. New Hampshire had more fire deaths than states such as: Utah, New Mexico, Nevada, Montana and Vermont. Adjusted for population, New Hampshire had a higher per capita fire death rate than Florida in 2015. On average, fires in the State of New Hampshire have the annual impact of: 15 deaths; 74 civilian injuries; 46 firefighter injuries and property damages of over 36 million dollars. Contributing factors to the US fire death rate were the lack of smoke alarms in residential occupancies and successful lobbying efforts by some home builder groups to block sprinkler requirements for residential occupancies. Nationally, only 43% of homes that experienced a fire were found to have operating smoke alarms installed within the home.



Locally, dwelling units in the City are still routinely found either to be missing smoke alarms or are using outdated devices. The Bureau continues to provide battery operated smoke alarms to residents when they are found in need in an effort to reduce the risk to the community.

The work activities of the Fire Prevention Bureau in 2015 included: inspections; investigations; consultations with the public; codes research; plan reviews; permitting; legal/violation actions and public education. Along with these activities, the Bureau also saw a significant increase in emergency responses. In 2015, the fire inspectors saw a 29% increase in emergency incident participation to assist the operations division when incident acuity or call volume warranted assistance.

#### 2015 FIRE PREVENTION ACTIVITIES



A significant amount of man-hours were spent by the fire inspectors during the year in preparing the Local Fire Prevention Ordinance which the City Council adopted in August. The revisions to the Ordinance, which were long overdue, required extensive research, analysis and transcribing.



The changes to the Ordinance were consistent with best practices as outlined in the most recent publication of the International Fire Code (IFC). The IFC is published by the same organization that publishes the International Building Code. This greatly reduces possible conflicts or redundancies between the Building Code and Fire Code.

A number of large commercial projects were completed in 2015 such as the DHMC Williamson Building and the Quail Ridge apartment complex. These projects required numerous inspections throughout the building process up to completion and the issuance of certificate of occupancy.

Several fire incidents were investigated by the Department in 2015. Most of these fires were classified as accidental in cause and included an electrical short circuit at a furniture store, a lightning strike in a condominium and ignition of flammable vapors on the roof of a health care occupancy. The Bureau also worked with the Lebanon Police Department to investigate an attempted arson at an occupied motel. The Bureau also assisted the Lebanon Police Department in providing fire safety education to a juvenile who assaulted another person with fire.

The Bureau assisted the Fire Department Administration in removing explosive materials from a home. The New Hampshire Fire Marshal's Office and the State Police, Ordinance Disposal Unit assisted with identifying and the ultimate removal of the materials from the site.

The Bureau also worked with several other local agencies in assisting an elderly person found living in extreme conditions, which resulted in 30 animal rescues. The person and animals were safely removed to receive the care that they needed.

The Bureau also assisted operators of 3 large industrial facilities in the City in 2015 with review of their plant operations and emergency plans. The inherent hazards associated with these facilities operations warrants close scrutiny by all involved parties. The City is unique in that it has a wide range of bulk fuel facilities that include: stored fuel oil; a liquid natural gas plant; compressed natural gas plants and liquefied propane gas plants.



The Bureau has good working relationships with these facility operators who share a common goal of safe operations.

Numerous live-fire fire extinguisher training sessions were provided to multiple businesses in the community.

This valuable education provides individuals with knowledge and skills to fight small fire incidents with a portable fire extinguisher.

This training also assists businesses with seeing reductions in their insurance rates.







## COMMUNITY SERVICE

Beyond the day-to-day response to calls for service, the Lebanon Fire Department participates in numerous community events each year. Our involvement in the community provides an environment for our personnel to interact with the public in a non-emergent setting. This allows our personnel to better understand the needs of the community and the citizens to better understand what services the department provides.

An interesting but little known fact is that our personnel not only participate in these events while on-duty, there are many events that they participate in off-duty.

### 2015 Highlights of Community Events

- ❖ Provided Live Fire Extinguisher Training to over 400 people.
- ❖ Participated in 15 Touch-a-Truck Safety Events.
- ❖ Delivered 9 CPR Training Classes.
- ❖ Conducted 6 Public Education Talks for local Day Cares.
- ❖ Participated in the Annual Bike Rodeo.
- ❖ Participated in the 2nd annual "Wings and Wheels" Event at the Lebanon Airport.
- ❖ Hosted 2 Junior High School students for the annual Job Shadow Day.
- ❖ Participated in the Memorial Day, Veterans Day, and the Lebanon and West Lebanon Alumni Day Parades.
- ❖ Provided an escort for the opening day of the Lebanon Little League.





- ❖ Hosted the 15<sup>th</sup> Annual Halloween Open House. This event draws several thousand adults and children to Station 1 each year for a SAFE and FREE Trick or Treating experience. Local businesses continue to donate candy, pizza, cider, cookies, etc. each year. Attendees also have the opportunity to receive fire safety information, to interact with firefighters, and to sit in fire trucks.
- ❖ Participated in the 2<sup>nd</sup> Annual Lebanon Citizens Academy.
- ❖ Participated in a September 11<sup>th</sup> Memorial Ceremony at the Lebanon High School Football Game.



Members of Lebanon Permanent Fire Fighters Association hosted and/or participated in the following events on their off-duty time:

- ❖ Muscular Dystrophy Boot Drive Fundraiser
- ❖ Operation Warm – this program raised over \$3,000 and purchased over 100 winter coats for local children this past winter.
- ❖ Firefighter Jeffrey Clattenburg participated in the 7<sup>th</sup> Annual CHAD Battle of the Badges Charity Hockey Game. To date FF



Clattenburg has personally raised over \$20,000 for the Children's Hospital at Dartmouth.

- ❖ Firefighter Jonathan Copeland participated in the 5<sup>th</sup> Annual CHAD Battle of the Badges Charity Baseball Game. To date Firefighter Copeland has personally raised over \$5,000 for the Children's Hospital at Dartmouth.



## **EMERGENCY MANAGEMENT**

The Lebanon Fire Department provides coordination for all activities related to the City of Lebanon Emergency Management Program and the Emergency Operations Center (EOC). The City's EOC is housed at the Lebanon Fire Department, Station 1 and serves as a command and control center in the event of a major incident. Chief Christopoulos serves as the Emergency Management Director (EMD) and is backed-up by Assistant Fire Chief Jeffrey Libbey and Lebanon Police Chief Gary Smith as Deputy EMDs. Emergency Management is responsible for the overall emergency preparedness of the City of Lebanon in the event of a natural or manmade emergency and for maintaining the City Emergency Operations Plan.

The Lebanon Emergency Operations Plan establishes a framework for city government to provide assistance in an expeditious manner to save lives and to protect property in the event of a disaster. The Emergency Management Team is also responsible for updating the City's Emergency Operations Plan and the Hazard Mitigation Plan. The Hazard Mitigation plan provides an opportunity to improve at risk facilities or infrastructure after a State of New Hampshire Declared Emergency.

The purpose of the Emergency Operations Plan is to facilitate the delivery of all types of emergency response and to help deal with the consequences of significant disasters. The Plan outlines the planning assumptions, policies, concept of operations, organizational structures and specific assignments of responsibility to the City departments and agencies involved in coordinating the Local, State and Federal response activities.

The Emergency Management Director also represents the City as the regional point of contact in our Public Health Emergency Planning. The region has worked over the last 10+ years to develop a comprehensive response plan for dealing with public health emergencies. The City hosts the Regional Coordination Center for coordinating the response to a public health emergency.



### **Emergency Management Activities for 2015**

- ❖ Provided several emergency management preparedness talks to local organizations.
- ❖ May 14-16 – managed a citywide response for a potentially contaminated potable water supply system. Emergency management staff provided direction of resources, public communications, bottled water, and coordinated the overall city response to this event.
- ❖ Continued to work with FEMA related to the July 2013 Flash Flooding Event reconstruction.





## **DEPARTMENT CONTACT INFORMATION**

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